

Please amend the following claims:

1. (Amended) A metallization stack in an integrated MEMS device, the metallization stack comprising:

a silicide layer formed on a semiconductor substrate of the integrated MEMS device;

a titanium-tungsten layer, formed directly on said silicide layer, to operatively contact an electrically conductive structure in the semiconductor substrate of the integrated MEMS device, and

a platinum layer formed over said titanium-tungsten layer.

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2. (Amended) The metallization stack of claim 1, wherein said electrically conductive structure is an active silicon element.

3. (Amended) The metallization stack of claim 2 wherein the semiconductor substrate has an insulating film formed thereon, the insulating film has a contact hole formed therein, the contact hole exposes a portion of the surface of the semiconductor substrate at a bottom of the contact hole and said silicide is formed only on the exposed portion of the surface of the semiconductor substrate.

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8. (Amended) The metallization stack of claim 7 wherein the electrically conductive structure is an interconnect of the Bio-MEMS device.

23. (Amended) The metallization stack of claim 1 wherein the semiconductor substrate has an insulating film formed thereon;

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the insulating film has a contact hole formed therein, the contact hole exposes a portion of the surface of the semiconductor substrate at a bottom of the contact hole and said silicide is formed only on the exposed portion of the surface of the semiconductor substrate;

said platinum layer being a portion of a platinum wire formed on the insulating film,
said platinum layer portion of the platinum wire being formed on said titanium-tungsten layer.

24. (Amended) The metallization stack of claim 23 wherein the integrated MEMS device is an optical MEMS.

25. (Amended) The metallization stack of claim 23 wherein the platinum wire is formed by:

depositing platinum on the insulating layer and the titanium-tungsten layer;

depositing an oxide hardmask over the platinum;

removing the oxide mask except for a portion of the oxide hardmask where the platinum wire is to be formed;

removing the platinum except for a portion of the platinum under the remaining oxide hardmask via a combination of dry etching and wet etching; and

removing the remaining oxide hardmask.

26. (Amended) The metallization stack of claim 25 wherein the platinum is removed by sputter etching the platinum in argon followed by wet etching in aqua regia.

Please add the following new claims:

--30. The metallization stack of claim 1, wherein said silicide layer is a platinum silicide layer.--

--31. The metallization stack of claim 23, wherein said silicide layer is a platinum silicide layer.--
